Frequently Asked Questions (FAQs) –

Kosovo Emissions Inventory

What is an Emissions Inventory?

An Emissions Inventory provides an estimate of the location and amount of pollutants being released into the air from different sources.

What is the purpose of an Emissions Inventory?

An Emissions Inventory is one of the major tools used in air quality management. It provides an understanding of what the relative contributions are from different sources to air pollution. It allows the development of effective actions to reduce emissions and improve ambient air quality.

Who created this Emissions Inventory?

The Kosovo Emissions Inventory was created by NIRAS as part of the Millennium Foundation of Kosovo (MFK) project: 'Supply of project management, air quality information management, behavior change and communication services', funded by the Millennium Challenge Corporation (MCC).

Where can I find the Emissions Inventory?

The Emissions Inventory itself is comprised of a series of spreadsheets in Microsoft Excel which contain the data on the pollutant sources. These are accompanied by a report which describes how the data was collated and the key findings. All are available in the KEPA wbsite http://ammk-rks.net/?page=1,162

What's the difference between 'emissions' and 'ambient concentrations'?

'Emissions' represent the amount of pollution emitted from individual sources such as chimneys (at industrial installations, houses, offices etc.) or activities like transport or mining. They are usually presented as a mass of pollutant over a time period eg megagrames per year (Mg/year). That is the focus of the Emissions Inventory.

'Ambient concentrations' represent the amount of a pollutant in the air at an outdoor location where someone is likely to be exposed to it. The level of pollutant at a given location is affected by emission sources (mainly those nearby but also sometimes those a long way away) after they have undergone some level of 'dispersion' in the atmosphere. Ambient concentrations are usually presented as a mass per volume of air eg micrograms per cubic metre ($\mu g/m^3$). This is not what the Emissions Inventory represents. But, the Emissions Inventory is a vital source of input data to a dispersion model which can then in turn be used to calculate ambient concentrations.

Can I use the Emissions Inventory to check ambient concentrations at my residence?

No. The Inventory characterises the sources of pollution only, it doesn't identify what ambient concentrations are.

What pollutants does it include and why were they selected?

The Kosovo Emissions Inventory focuses on the following pollutants: PM_{10}, $PM_{2.5}$, nitrogen oxides (NO_x), sulfur dioxide (SO_2), carbon monoxide (CO), total non-methane volatile organic compounds

(NMVOC), arsenic (As), cadmium (Cd), mercury (Hg) and lead (Pb). These pollutants were chosen because they can all have a direct negative effect on human health.

Why does the Inventory not include carbon dioxide (CO_2) and other greenhouse gases?

The focus of the project under which the Inventory was developed is specifically on providing better information on pollutants which directly effect human health, rather than those that contribute to climate change.

Where did the information used to create the Emissions Inventory come from?

The creation of the emission inventory was based on a methodology provided by the European Environment Agency and was supported by existing data in Kosovo.

This included data from other inventories created by the Kosovo Environmental Protection Agency (KEPA), Japan International Cooperation Agency (JICA) for specific areas of Kosovo.

At a national level data were collected from institutions such as the Kosovo Statistical Agency and Kosovo Cadastral Agency Ministry of Infrastructure. At a local level data were collected from City Municipalities. In some cases, specific data were taken from other studies such as those undertaken by the European Union (EU).

What key things does the Emissions Inventory tell us?

The largest sources of emissions of PM_{10} and $PM_{2.5}$ are small combustion, mainly domestic heating. Overall, almost 50% of PM_{10} and 68% of $PM_{2.5}$ comes from small combustion. Industry is the second largest with 37% for PM_{10} and 24% for $PM_{2.5.}$ Transport, mainly road traffic, is the third source with 11% and 7% shares in emission respectively. The remaining sectors account for less than 5% of emissions.

Industry and transport, mainly road traffic, are the largest emissions sources of NO_x. Industry represents 57% and transport 30%.

Industry is the largest source of SO_2 emissions at 96%.

Most emissions of PM_{10}, $PM_{2.5}$ and NO_x occur in urban areas and along main roads.

Has the Emissions Inventory taken account of changes in emissions related to the COVID-19 pandemic?

No. The data in the inventory represents the year 2018.